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REMARKS

The above amendments and the below remarks are responsive to the Office Action, dated June 28, 2005, entered in the above referenced pending application. The pending claims are 12-15. Each of the Examiner's rejections are addressed separately below.

Information Disclosure Statement

A supplemental Information Disclosure Statement is being filed concurrently herewith to include the month and year of the publications indicated by the Examiner as not being considered.

Rejections under 35 U.S.C. § 103

Claims 12-15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication 2002/0182441 ("Lamansky") in view of the Dedeian et al. article <u>Inorganic Chemistry</u>, Vol. 30, 1991, 1685-1687 ("Dedeian") and U.S. Patent Application Publication 2002/0048689 ("Igarishi"). Applicants respectfully traverse this rejection.

Claim 12, is directed to a specific compound. Claims 13-15 are device claims dependent on Claim 12. It is respectfully submitted that none of the cited references when read either alone or in combination teach or suggest the compound of Claim 12.

In particular, as indicated by the Examiner, Lamansky discloses iridium metal complexes having 2-phenylpyridine ligands. In Figure 5(a) of Lamansky a generic phenylpyridine ligand is shown having an R₁ substituent on the phenyl ring and R₂ on the pyridine ring. In Figure 5(b) of Lamansky a generic phenylpyridine ligand is shown having a methyl group in the 4-position on the phenyl ring as well as an R₂ substituent, and an R₁ substituent on the pyridine ring. However, R₁ and R₂ are not defined. The only examples of substituted phenylpyridine ligands are 4,6-difluorophenylpyridine and 4,5-difluorophenylpyridine. This is to be contrasted with Claim 12 directed to a compound with the "F" on the phenyl ring and CF³ on the pyridine ring.

The Examiner has pointed to *Dedeian* to provide the substituents. *Dedeian* discloses iridium complexes having three substituted 2-phenylpyridine ligands ("tris complexes") as strong photoreducing agents. The complexes of *Dedeian* have substituents only on the phenyl group in the phenylpyridine ligand, *i.e.*, 4-fluorophenyl and 4-trifluoromethylphenyl. *See* Table I at the top of page 1686. There is no teaching or suggestion in either reference of a trifluoromethyl substituent on the <u>pyridine</u> ring. The Examiner has further pointed out that the *Lamansky* and *Dedeian* references share a common author. Applicants submit that because of this, the *Lamansky* reference teaches away from trifluoromethyl substituents. Since the

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mentioned it if it were suitable for the phenylpyridine ligands of Lamansky. The failure to list fluoroalkyl or trifluoromethyl as a substituent is an indication against its use.

The addition of the teaching of the *Igarishi* reference does not overcome the deficiencies of two references cited as noted above. *Igarishi* discloses iridium complexes with phenylpyridine ligands as compound (3) on page 5. The phenyl ring can have substituents R³² and the pyridine ring can have substituents R³³. These can be the same as the groups represented by *Igarishi* R¹, which includes a long laundry list of groups on pages 4 and 5. However, none of the groups listed for *Igarishi*'s R¹ is a fluoroalkyl or trifluoromethyl group. Furthermore, the groups listed as suitable for *Igarishi's* R³³ on the pyridine ring are alkyl, aryl, amino and alkoxy, and only methyl and dimethylamino groups are exemplified. Based on the combined teachings of *Lamansky*, *Dedeian*, and *Igarishi*, and absent Applicants' teaching, one of ordinary skill in the art would not know to use a trifluoromethyl substituent in the 5-position of the pyridine ring of a phenylpyridine ligand and arrive at the compound recited in Claim 12.

Since the compound of Claim 12 is both novel and nonobvious, the devices using such compounds are patentable as well. Thus, Claims 13-15 are patentable.

Applicants respectfully request that this rejection be withdrawn.

Conclusion

In view of the foregoing amendments and remarks, Applicants submit that the above referenced pending application is in condition for allowance. A Notice of Allowance for Claims 12-15 is earnestly solicited.

Respectfully submitted,

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